

CLAIMS

What is claimed is:

1. An LCD driver IC chip comprising:

a pad member connected to an internal semiconductor device circuit and having an electrical connection region to the exterior;

at least one insulating film formed at a peripheral portion of the pad member and around the electrical connection region;

a metal layer covering the pad member and the insulating film;

and

a bump electrode provided on the metal layer,

wherein the bump electrode and the pad member lie above at least a part of the semiconductor device circuit with an insulating interlayer provided therebetween.

2. An integrated circuit chip comprising:

a device circuit;

a transistor in said device circuit;

a pad positioned above said transister and connected to said device circuit;

an insulating interlayer between said pad and said transistor;

and

a bump electrode on said pad.

3. The chip of claim 2 wherein the device circuit further comprises
are of an input circuit and an output circuit.

4. The chip of claim 2 wherein the pad further comprises one of an
input pad and an output pad.

5. The chip of claim 2 wherein the bump is positioned above said
transistor.

6. The chip of claim 2 further comprising a via interconnecting
said pad and said device circuit.

7. The chip of claim 6 further comprising a lead layer of said
insulating interlayer interconnecting said via and said pad.

8. The chip of claim 2 further comprising a passivation film formed
at a peripheral portion of the pad.

9. The chip of claim 8 further comprising a metal layer covering
said passivation film and said pad.

10. The chip of claim 9 wherein said metal layer is interposed between said pad and said bump.

9